Premeasurments Countd. On : 09/05/2019								
2	BOQ No-2	Excavation of removal of silt mixed with sand, human excreta, garbage in slussy condition from Strom water drain in Bengaluru City including disposing off the same as directed including cost of machinery labour, fule, etc, complete (By Mechanical Means)with all lead and lifts for disposing off to designated site						
		Lead drain	Cum	1	30.00	1.50	1.15	51.75
		NH-4 to Urdu school		1	30.00	5.35	1.20	192.60
				1	25.00	5.35	1.10	147.13
							Total quantity	391.48
							Grand Total Quantity	827.17
							Existing area lead of drian	330.55
							Total	496.61
							Deduct shrinkage 15%	-74.49
							Net Quantity	422.12

Sch - 2

PMC

Assistant Engineer,
SWD Dasarahalli Zone,BBMP.

Assistant Executive Engineer,
SWD Dasarahalli Zone,BBMP.

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BRUHAT BENGALURU MAHANAGARA PALIKE

Tender Name: Construction of RCC culverts & remodeling of U Shape drain for secondary SWD S Ramesh road to Urdu school in Dasarahalli Ward No.15

Sl. No		Description of work	Unit	No	Dimensions			Quantity
					L	B	D	
		Premeasurments Countd. On : 02/05/2019						
1	BOQ No-1	KSRRB M200-12.3 Dismantling of Existing Structures like Culverts,Bridges,Retaining Walls and other structures comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding where ever necessary,sorting the dismantled material,disposal of unserviceable material and stacking the seviceable material with all lifts complete as per specifications.(Prestressed/ reinforced cement concrete grade M20 and above) as directed by the Engineer in charge of the work						
			Cum	1	10.00	0.45	0.60	2.70
				1	10.00	0.45	0.9	4.05
							Total	6.75

chkFC

BYH CONSULTING ENGINEERS BENGALURU PMC

Assistant Engineer, SWD Dasarahalli Zone,BBMP.

Assistant Executive Engineer, SWD Dasarahalli Zone,BBMP.

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BRUHAT BENGALURU MAHANAGARA PALIKE								
Tender Name: Construction of RCC culverts & remodeling of U Shape drain for secondary SWD S Ramesh road to Urdu school in Dasarahalli Ward No.15								
Sl. No		**Description of work**	**Unit**	**No**	**Dimensions**			**Quantity**
					L	**B**	**D**	
Premeasurments Countd. On : 02/05/2019								
	E2	KSRRB M200-12.3 Dismantling of Existing Structures like Culverts,Bridges,Retaining Walls and other structures comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding where ever necessary,sorting the dismantled material,disposal of unserviceable material and stacking the seviceable material with all lifts complete asperspecifications.(Prestressed/ reinforced cement concrete grade M20 and above)						
			Cum	1	6.00	3.00	0.30	5.40
				2	6.00	0.30	0.9	3.24
							Total	**8.64**

PMC

Assistant Engineer,
SWD Dasarahalli Zone,BBMP.

Assistant Executive Engineer,
SWD Dasarahalli Zone,BBMP.

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BRUHAT BENGALURU MAHANAGARA PALIKE

Tender Name: Construction of RCC culverts & remodeling of U Shape drain for secondary SWD S Ramesh road to Urdu school in Dasarahalli Ward No.15

Measurments Countd. On : 04/05/2019

Sl. No		Description of work	Unit	No	Dimensions L	B	D	Quantity
3	BOQ No-3	Diversion of Water course by providing **coffer dams** or bunds or islands as may benecessary for piers and abutments, foundations, bailing out or pumping water during exavation and until completion etc., complete 1.5m depth below LWL						
			Cum	1	30.00	0.90	0.80	21.60
				1	30.00	0.90	0.80	21.60
							Total quantity	**43.20**

BVH CONSULTING ENGINEERS BENGALURU PMC

Assistant Engineer, SWD Dasarahalli Zone,BBMP.

Assistant Executive Engineer, SWD Dasarahalli Zone,BBMP.

Measurments Countd. On : 04/05/2019

Sl. No		Description of work	Unit	No	Dimensions L	B	D	Quantity
3	BOQ No-3	Diversion of Water course by providing **coffer dams** or bunds or islands as may benecessary for piers and abutments, foundations, bailing out or pumping water during exavation and until completion etc., complete 1.5m depth below LWL						
				1	15.00	0.90	0.80	10.80
				1	30.00	0.90	0.80	21.60
				1	25.00	0.90	0.80	18.00
							Total quantity	**50.40**
							Total	**93.60**

BVH CONSULTING ENGINEERS PMC

Assistant Engineer, SWD Dasarahalli Zone,BBMP.

Assistant Executive Engineer, SWD Dasarahalli Zone,BBMP.

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BRUHAT BENGALURU MAHANAGARA PALIKE

Tender name: Construction of RCC culverts & retaining wall in Shade map in secretion SWD 5 Ramesh Halli to Lal canal in Dasarahalli Ward No. 15

Sl. No.		Description of work	Unit	No	Dimensions			Quantity
					L	B	D	
4	[illegible]	[illegible]						
		Description of work	Unit	No	Dimensions			Quantity
					L	B	D	
		[illegible]	Cum	1	30.00	[illegible]	[illegible]	318.[illegible]
							Total quantity	318.[illegible]

Assistant Engineer
SWD Dasarahalli Zone,BBMP

Assistant Executive Engineer
SWD Dasarahalli Zone,BBMP

Sl. No.		Description of work	Unit	No	Dimensions			Quantity
					L	B	D	
5	[illegible]	[illegible]						
		Description of work	Unit	No	Dimensions			Quantity
					L	B	D	
		[illegible]	Cum	1	30.00	(6.00+16.00/2	1.69	304.20
							Total quantity	304.20

Assistant Engineer
SWD Dasarahalli Zone,BBMP

Assistant Executive Engineer,
SWD Dasarahalli Zone,BBMP.

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BRUHAT BENGALURU MAHANAGARA PALIKE

Tender Name: Construction of RCC culverts & remodeling of U Shape drain for secondary SWD S Ramesh road to Urdu school in Dasarahalli Ward No.15

Sl. No		Description of work	Unit	No	Dimensions L	Dimensions B	Dimensions D	Quantity
		Premeasurments Countd. On : 06/05/2019						
6	BOQ No-8	Providing and filling in Foundation with **granite/trap broken metal 100mm** . And down size, with approved sand including hand packing, ramming , watering, including cost of all materials and labours with all lead and lift. Complete as per specifications including all lead and as per the directions of engineer in charge of work.						
		Description of work	**Unit**	**No**	**L**	**B**	**D**	**Quantity**
		U-Shape -Boulders CH-0.00 to 30.00	Cum	1	30.00	(4.80+4.80)/2	0.30	43.20
							Total quantity	43.20

PMC

Assistant Engineer.
SWD Dasarahalli Zone,BBMP.

Assistant Executive Engineer.
SWD Dasarahalli Zone,BBMP.

		Premeasurments Countd. On : 06/05/2019						
8	BOQ No-10	KSRRB M2100-10 - Plain Cement Concrete **M10 with OPC** cement @ 220 kgs, with crushed 40mm and down size graded metal coarse aggregates @0.84 cum and fine aggregates @ 0.56cum, in foundation mechanically mixed placed in foundation and compacted by vibration including curing for 14 days complete as per specifications MORTH Specification No.2100 with all leads and lifts as directed by the engineer in charge of the work						
		Description of work	**Unit**	**No**	**L**	**B**	**D**	**Quantity**
		U-Shape -PCC CH-0.00 to 3.075	Cum	1	3.08	(4.60+4.45)/2	0.15	2.09
		U-Shape -PCC CH-3.075 to 18.075		1	15.00	(4.45+4.45)/2	0.15	10.01
		U-Shape -PCC CH-18.075 to 33.075		1	15.00	(4.45+4.45)/2	0.15	10.01
							Total quantity	22.11

CH+FC

PMC

Assistant Engineer.
SWD Dasarahalli Zone,BBMP.

Assistant Executive Engineer.
SWD Dasarahalli Zone,BBMP.

Executive Engineer(S)
Dasarahalli Zone,BBMP

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BRUHAT BENGALURU MAHANAGARA PALIKE

Tender Name: Construction of RCC culverts & remodeling of U Shape drain for secondary SWD S Ramesh road to Urdu school in Dasarahalli Ward No 15

Premeasurments Countd. On : 06/05/2019							
	Description of work	Unit	No	Dimensions			Quantity
				L	B	D	
BOQ No-9	KSRB 2.8 : Providing and Filling in foundation with granite I trap broken metal 100mm (available boulders obtained from dismantaling of masonary including charges for breaking into pieces) and down size, with approved sand including hand packing, ramming, watering, including cost of all materials and labour with all lead and lift. complete as per specifications.specification. No. KBS with all leads and lifts as directed by the Engineer in charge of the work.						
	Description of work	**Unit**	**No**	**Dimensions**			**Quantity**
				L	**B**	**D**	
		Cum					
			1	qty as vide Item No1- 50% qty 6.75			3.38

EVK CONSULTING ENGINEERS BENGALURU PMC

Assistant Engineer,
SWD Dasarahalli Zone,BBMP.

Assistant Executive Engineer,
SWD Dasarahalli Zone,BBMP.

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U-Shape

Premeasurement counted on 08/05/2019

Name of Work	**Construction of RCC culverts & remodeling of U Shape drain for secondary SWD S Ramesh road to Urdu school in Dasarahalli Ward No.15**
BOQ-20	Supplying,fitting and placing **TMT** bar reinforcement in sub-structure complete as per drawing and technical specifications complete as per specifications. **TMT Bars Fe 500** all leads and lifts as directed by the Engineer in charge of the work.

SL No.	DESCRIPTION	Shape of Bar	Dia of Bar	Spacing (M)	Nos			Cut Length	Total Length in (M) 10	12	16	32
A	Raft CH-0.00 to 3.075											
	U-shape											
	Length = 3.08											
	Raft Bottom Bar		**12**	0.175	1	**19**	1	4.80	-	91.20	-	-
	Raft Top Bar		**16**	0.15	1	**22**	1	4.70	-	-	103.40	-
	Dirtribution		**10**	0.20	2	**24**	1	3.08	147.84	-	-	-
	Inner Wall		**12**	0.20	2	**16**	1	3.25	-	104.00	-	-
	Outer Wall		**12**	0.175	2	**19**	1	3.60	-	136.80	-	-
	Dirtribution		**10**	0.20	4	**14**	1	3.08	172.48	-	-	-
	Chairs		**12**		1	**6**	1	1.50	-	9.00	-	-
	U Bar		**12**		2	**3**	1	1	-	6.00	-	-
								Total Length (Rmt)	320.32	347.00	103.40	6.316
								Unit weight of bar	0.617	0.888	1.567	-
								Total quantity in KG	197.640	308.140	162.030	-
								Sub quantity	667.81	0.67 Tonne		

0.56

Executive Engineer (SW)
Dasarahalli Zone, BBMP

B.V.H. CONSULTING ENGINEERS

Assistant Engineer
BBMP- SWD, Dasarahalli Zone
Bengaluru

Assistant Executive Engineer
BBMP- SWD, Dasarahalli Zone
Bengaluru

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U Shape

Premeasurement counted on 08/01/2019

Name of Work	**Construction of RCC culverts & remodeling of U Shape drain for secondary SWD S Ramesh road to Urdu school in Dasarahalli Ward No.15**
BOQ-20	Supplying,fitting and placing **TMT** bar reinforcement in sub-structure complete as per drawing and technical specifications complete as per specifications **TMT Bars Fe 500** all leads and lifts as directed by the Engineer in charge of the work.

Sl. No.	DESCRIPTION	Shape of Bar	Dia of Bar	Spacing (M)	Nos			Cut Length	Total Length in (M)			
									10	12	16	32
9	Raft (34.1.67) to (4.77)											
	U-shape											
	Length = 15.00											
	Raft Bottom Bar		12	0.175	1	87	1	4.80		417.60		
	Raft Top Bar		16	0.15	1	101	1	4.60			464.60	
	Distribution		10	0.20	2	23	1	15.00	690.00			
	Inner Wall		12	0.20	2	76	1	3.25		494.00		
	Outer Wall		12	0.175	2	87	1	3.60		626.40		
	Distribution		10	0.20	4	14	1	15.00	840.00			
	Chairs		12		1	35	1	1.50		52.50		
	90 Bar		12		2	15	1	1		30.00		
								Total Length (Rmt)	1,530.00	1,628.50	464.60	
								Unit weight of bar	0.617	0.888	1.562	6.310
								Total quantity in Kg	944.010	1,435.600	725.930	
								Sub quantity	3.111 Tonne			

3111.54

Rakesh 6/5/19
Assistant Engineer
BBMP SWD Dasarahalli Zone
Bengaluru

Executive Engineer
BBMP SWD Dasarahalli Zone
Bengaluru

Dasarahalli Zone DUMP

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U-Shape

Premeasurement counted on 08/05/2019

Name of Work	**Construction of RCC culverts & remodeling of U Shape drain for secondary SWD S Ramesh road to Urdu school in Dasarahalli Ward No.15**
BOQ-20	Supplying,fitting and placing **TMT** bar reinforcement in sub-structure complete as per drawing and technical specifications complete as per specifications. **TMT Bars Fe 500** all leads and lifts as directed by the Engineer in charge of the work.

SL No.	DESCRIPTION	Shape of Bar	Dia of Bar	Spacing (M)	Nos			Cut Length	Total Length in (M)			
									10	12	16	32
A	Raft CH-18.075 to 33.075											
	U-shape											
	Length = 15.00											
	Raft Bottom Bar		**12**	0.175	1	**87**	1	4.80	-	417.60	-	-
	Raft Top Bar		**16**	0.15	1	**101**	1	4.60	-	-	464.60	-
	Dirtribution		**10**	0.20	2	**23**	1	15.00	690.00	-	-	-
	Inner Wall		**12**	0.20	2	**76**	1	3.25	-	494.00	-	-
	Outer Wall		**12**	0.175	2	**87**	1	3.60	-	626.40	-	-
	Dirtribution		**10**	0.20	4	**14**	1	15.00	840.00	-	-	-
	Chairs		**12**		1	**35**	1	1.50	-	52.50	-	-
	U Bar		**12**		2	**15**	1	1	-	30.00	-	-
								Total Length (Rmt)	1,530.00	1,620.50	464.60	-
								Unit weight of bar	0.617	0.888	1.567	6.310
								Total quantity in KG	944.010	1,439.000	728.030	-
								3111.04 **Sub quantity**	3.11 Tonne			

Executive Engineer (SWD)
Dasarahalli Zone BBMP

Assistant Engineer
BBMP- SWD, Dasarahalli Zone
Bengaluru
8/5/19

Assistant Executive Engineer
BBMP- SWD, Dasarahalli Zone
Bengaluru
Jayaram.K.

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BRUHAT BENGALURU MAHANAGARA PALIKE

Tender Name: Construction of RCC culverts & remodeling of U Shape drain for secondary SWD S Ramesh road to Urdu school in Dasarahalli Ward No.15

Premeasurments Countd. On : 10/5/2019

9	BOQ No-11	KSRRB M2100-17.2. **Plain / Reinforced Cement Concrete design mix M25 with OPC cement** @ 340kgs, with 20mm and down size graded granite metal coarse aggregates @0.70cum and fine aggregates @ 0.47cum, with superplastisiser @3lts confirming to IS9103-1999 Reaffirmed-2008,Open **Foundation complete** as per Drawing and Technical Specification Case - II : With Batching Plant, Transit Mixer and Concrete Pump MORTH Specification No. 1500,1700 & 2100 with all leads and lifts as directed by the engineer in charge of the work.						
		Description of work	**Unit**	**No**	**Dimensions**			**Quantity**
					L	**B**	**D**	
		U-Shape -Raft CH-0.00 to 3.075	Cum	1	3.08	(4.5+4.30)/2	0.30	4.06
		U-Shape -Raft CH-3.075 to 18.075		1	15.00	(4.3+4.30)/2	0.30	19.35
		U-Shape -Raft CH-18.075 to 33.075		1	15.00	(4.3+4.30)/2	0.30	19.35
							Total quantity	42.76

PMC

Assistant Engineer,
SWD Dasarahalli Zone,BBMP.

Assistant Executive Engineer,
SWD Dasarahalli Zone,BBMP.

Premeasurments Countd. On : 17/05/2019

10	BOQ No-12	KSRRB M2200-5.12.**Design mix M25 sub structure with OPC cement** @ 340kgs, with 20mm and down size graded granite metal coarse aggregates @0 7cum and fine aggregates @ 0.47cum, with superplastisiser @3lts confirming to IS9103-1999 Reaffirmed-2008 - i) **Upto 5m** height. upto 5mtrs height with all leads and lifts as directed by the engineer in charge of the work						
		Description of work	**Unit**	**No**	**Dimensions**			**Quantity**
					L	**B**	**D**	
		U-Shape -Wall CH-0 00 to 3.075	Cum	2	3.08	(0.275+0.40)/2	2.40	4.98
		U-Shape -Wall CH-3.075 to 18.075		2	15.00	(0.25+0.35)/2	2.40	21.60
		U-Shape -Wall CH-18.075 to 33.075		2	15 00	(0.25+0.35)/2	2.40	21.60
							Total quantity	48.18

PMC

Assistant Engineer,
SWD Dasarahalli Zone,BBMP.

Assistant Executive Engineer,
SWD Dasarahalli Zone,BBMP.

Executive Engineer (SWD)
Dasarahalli Zone,BBMP

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BRUHAT BENGALURU MAHANAGARA PALIKE

Tender Name: Construction of RCC culverts & remodeling of U Shape drain for secondary SWD S Ramesh road to Urdu school in Dasarahalli Ward No.15

Sl. No		Description of work	Unit	No	Dimensions			Quantity
					L	B	D	
		Measurments Countd. On : 11/05/2019						
4	BOQ No-4	Excavation in **marshy soil upto 3m** depth for foundation of structures as per drawing and technical specifications, removing the excavated stuf to a lead of 15m, including dewatering, shoring, refilling trenches in 250mm layers, wherever necessary watering and ramming, including cost of all materials, labour complete as per specifications. v . Marshy soil - B Mechanical means as directed by the Engineer in charge of the work.						
		Description of work	**Unit**	**No**	**Dimensions**			**Quantity**
					L	**B**	**D**	
		U-Shape - CH-30.00 to60.00		1	30.00	6.00	0.65	117.00
		U-Shape - CH-60.00 to 75.00		1	15.00	6.00	0.75	67.50
							Total quantity	**184.50**

CONSULTING ENGINEERS BENGALURU PMC

Assistant Engineer.
SWD Dasarahalli Zone,BBMP.

Assistant Executive Engineer,
SWD Dasarahalli Zone,BBMP.

		Premeasurments Countd. On : 11/05/2019						
5	BOQ No-5	"**KSRRB M2100-2.1.** Earth work in excavation for foundation of structures as per drawing and technical specifications, including setting out, construction of shoring and bracing, removal of stumps and other deleterious matter, dressing of sides and bottom and backfilling with approved material complete as per MORTH Specification No. 304 B. in **Ordinary soil upto 3m depth(By mechanical means)** as directed by the Engineer in charge of the work.						
		Description of work	**Unit**	**No**	**Dimensions**			**Quantity**
					L	**B**	**D**	
		U-Shape - CH-30.00 to60		1	30.00	(6.00+)6.00/2	1.66	298.80
		U-Shape - CH-60.00 to 75.00		1	6.25	(6.00+)6.00/2	1.72	64.50
							Total quantity	**363.30**

CONSULTING ENGINEERS BENGALURU PMC

Assistant Engineer.
SWD Dasarahalli Zone,BBMP.

Assistant Executive Engineer,
SWD Dasarahalli Zone,BBMP.

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